



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,609	08/01/2003	Peter Keller	188.542	4742
HEDMAN & C 1185 AVENUE	7590 05/21/2007 COSTIGAN P.C. E OF THE AMERICAS		EXAMINER JOYCE, WILLIAM C	
NEW YORK, NY 10036			ART UNIT .	PAPER NUMBER
		•	3682	
•				
			MAIL DATE	DELIVERY MODE
	•		05/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summany	10/632,609	KELLER ET AL.				
Office Action Summary	Examiner	Art Unit				
	William C. Joyce	3682				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 27 Fo	hruan, 2007					
	Responsive to communication(s) filed on <u>27 February 2007</u> . This action is FINAL 2b\\ This action is non final.					
	,—					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.						
4a) Of the above claim(s) 1,3-8 and 10 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>2,9 and 11</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
	•					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<u> </u>						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No.						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the confidence not received.						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/632,609 Page 2

Art Unit: 3682

DETAILED ACTION

This Office Action is in response to the amendment filed February 27, 20007 for the above identified patent application.

Election/Restrictions

1. Claims 1, 3-8 and 10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 9, 2006. newly amended claims 1 and 10 are now withdrawn because they do not read on the elected Figures 5 and 6. Specifically, Figures 5 and 6 do not teach the concave shaped wall encompassing less than half of the peripheral surface of the ball. It is acknowledged that the embodiment of Figures 3-4 teach the concave shaped wall encompassing less than half of the peripheral surface of the ball. Referring to applicant's remarks (page 8, last paragraph) filed 11/20/06, it is acknowledged that claim 1 defines the concave shape walls of the spacers configured to encompass less than half of the peripheral surface of the balls, such that the balls are not held within the spacer but only separate the balls. Accordingly, the embodiment of Figure 3 appears to only separate the balls wherein the embodiment of Figure 5 holds the balls within the spacer.

Application/Control Number: 10/632,609 Page 3

Art Unit: 3682

Claim Objections

2. In the event claim 1 is rejoined, it would be objected to because of the following informalities: In the third line from the bottom, the term "eac" must be changed to -- each--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 2, 9, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The newly added limitation defining the concave wall of the spacer encompassing more than half the peripheral surface of the ball is not fully understood. Specifically, it is unclear as to whether the concave surface encompasses more than half of the entire peripheral surface of the ball or encompasses more than half of a peripheral surface cut by a plane as shown in Figure 5. In the event applicant intends to define the spacer concave surface as encompassing more than half of the entire peripheral surface of the ball, the claims would be rejected as containing new matter because the original disclosure, including the Figures, do not clearly disclose this feature.

Application/Control Number: 10/632,609 Page 4

Art Unit: 3682

5. Claims 2, 9, and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the event applicant intends to define the spacer concave surface as encompassing more than half of the entire peripheral surface of the ball, the claims would be rejected as containing new matter because the original disclosure, including the Figures, do not clearly disclose this feature.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Lee (USP 6,652,146) or Shiria (JP 5-126149) in view of Koschmieder (DT 26 18 535).

Either one of Lee or Shiria discloses a linear rolling bearing comprising a guide rail and a guide carriage that partially surrounds the guide rail and is supported by rolling elements for sliding on two long sides of the guide rail, the rolling elements being arranged on each of the two long sides in at least two parallel, endlessly recirculating

rows of rolling elements while a continuous spacer arrangement is inserted between every two successive rolling elements of a row.

The prior art to Koschmieder teaches a linear rolling bearing comprising a guide rail and a guide carriage 1, rolling elements 6, and spacers 7,14 inserted between every two successive rolling elements of a row, wherein, on each long side of the guide rail, a common spacer for both of said two rows is inserted between every two adjacent rolling elements of a first of said two rows and between every two adjacent rolling elements of a second of said two rows.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the rolling element spacing device of either one of Lee or Shiria with the spacing arrangement taught by Koschmieder, motivation being to provide a modular arrangement for supporting the rolling elements at a predetermined spacing.

With respect to claim 9, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the spacers from a porous material, such as a sintered metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

8. Applicant's arguments filed November 20, 2006 have been fully considered but they are not persuasive.

Art Unit: 3682

Applicant argues the Koschmieder reference does not teach the concave wall of the spacer encompassing less than half of the outer peripheral wall, such that the balls are not held within the spacer. This argument is not commensurate with the scope of claims 2, 9, and 11. Accordingly, the claims stand rejected as described above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

Art Unit: 3682

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William C. Joyce